## REMARKS

Claims 1-14 and 17-25 are all the claims pending in the application.

## I. Response to Rejection of Claims 1-14 and 17-24 under 35 U.S.C. § 112, second paragraph

Claims 1-14 and 17-24 are rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite.

Applicants respectfully traverse for the reasons of record and for the following reasons.

It is submitted that one of skill in the art would understand "MW" refers to weight average molar mass, as denoted by "$M_W$".

In the field of polymer science, molecular weight is known to not be a unique value, but merely a distribution of molecular weights. Therefore, molecular weight of polymers is given either as a distribution of molecular weight or as an average molecular weight. The average molecular weight is generally given as a weight average molecular weight "Mw" or as a number average molecular weight "$M_n$". *See e.g.,* "Chapter 3: Polymer Molecular Weight" submitted herewith.

This is apparent from the enclosed technical data sheet regarding the compounds discussed at page 11 of the specification (*i.e.*, SMA 1000, SMA 2000 and SMA 3000) that these values $M_W$ and $M_n$ are relied upon in this technical field. In addition, the values indicated for $M_W$ for these compounds is 5,500, 7,500 and 9,500, respectively, and lie within the range of 1,400 to 10,000 indicated for such compounds at page 11 of the specification. *See* technical data sheets for SMA 1000, SMA 2000 and SMA 3000 submitted herewith.

In view of the above, it is submitted that one of skill in the art would understand that "MW" necessarily refers to weight average molar mass "$M_W$".

Accordingly, withdrawal of the rejection is respectfully requested.

## II. Response to Rejection of Claims 1-14, 17 and 19-24 under 35 U.S.C. § 103(a)

Claims 1-4, 17 and 19-24 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Ito et al. (US 4,690,856) in view of Gervasi (US 5,939,512).

Applicants respectfully traverse for the reasons of record and for the following reasons.

It is submitted that Gervasi is nonanalogous art, and thus it would not have been obvious to a person having ordinary skill in the art to combine Ito and Gervasi.

The test to determine whether cited art is analogous art is (1) whether the art is from the same field of endeavor, regardless of the problem addressed, and (2) if the reference is not within the field of the inventor's endeavor, whether the reference still is reasonably pertinent to the particular problem with which the inventor is involved.

In this case, Gervasi is not in the same field of endeavor as the present invention since it relates to a polymer material used in the production of molded articles while the present invention relates to metal laminates. Specifically, the field of endeavor of the present invention may be considered the field of metal laminates, in particular those that undergo a subsequent forming step and cataphoresis step (*see e.g.,* page 1, lines 1-3 of the specification). Gervasi relates to polymeric materials used in the production of molded articles and more particularly to those which exhibit fast molding cycling time and good toughness characteristics (*see e.g.*, col. 1 lines 15-19). Thus, Gervasi, which relates to polymers for molded articles, is not in the same field of endeavor as the present invention.

In addition, Gervasi is not reasonably pertinent to the particular problem with which the inventor is involved. The problem with which the inventor is involved is providing metal laminates which show good heat resistance and surface appearance after forming (*see e.g.*, page 3, line 8 of the specification. Gervasi does not refer to the problem of providing polymers which exhibit a sufficient heat resistance of the adhesion properties and ductility, the particular

problem with which the inventor is involved.

For at least the foregoing reasons, it is submitted that Gervasi is nonanalogous art.

In addition, even if Gervasi were analogous art, it is submitted that a person having ordinary skill in the art would not have a reason to modify Ito in order to increase viscosity.

The Examiner asserts that it would have been obvious for a person having ordinary skill to add a styrene maleic anhydride polymer having a molecular weight of 1,400 to 10,000 to the composition of Ito in order to improve the viscosity and shape retention of the final product.

Applicants disagree.

Gervasi discloses improving the properties of unmodified polyamides by addition of functionalized polyolefinic modifiers (*see e.g.,* col. 2, lines 42-46) and teaches the use of styrene maleic anhydride copolymer as a viscosity increasing additive (*see e.g.*, col. 5, line 49 to col. 6, line 1). High viscosity is taught in Gervasi as useful for shape retention of molded products under high temperature conditions.

However, Ito is not concerned with this problem, since it addresses the issue of improving the bonding forces of polyamide adhesive, and more particularly prevents peeling of bonded steel-plates subjected to high-temperature treatment (*see e.g.*, col. 1, lines 34-38). In fact, Ito seeks to avoid high viscosity since it explicitly teaches keeping the proportion of a modifier to less than 5 parts by weight per 100 parts by weight of the polyolefin in order to avoid a drastic increase of viscosity (*see e.g.,* col. 3, lines 40-43).

Accordingly, in view of the object and teachings of Ito, a person having ordinary skill in the art would not modify the composition of Ito by incorporating a styrene maleic anhydride copolymer.

For at least the foregoing reasons, it is submitted that a *prima facie* case of obviousness has not been established.

Furthermore, it is submitted that the claimed invention provides unexpectedly superior results. That is, based on the disclosure of Gervasi, which teaches increasing viscosity by using styrene maleic anhydride copolymer, a person having ordinary skill in the art would not expect that the use of styrene maleic anhydride copolymer would decrease the viscosity of the claimed invention. In contrast to Gervasi, in the present invention, styrene maleic anhydride is added to avoid a viscosity increase. *See* arguments set forth in the Amendment filed on September 17, 2010.

In view of the above, it is submitted that claim 1 is patentable over the cited art. Moreover, it is submitted that claims 2-14 and 17-25 are patentable over the cited art for the same reasons as claim 1.

Accordingly, withdrawal of the rejection is respectfully requested.

## II. Conclusion

In view of the above, reconsideration and allowance of claims 1-14 and 17-25 is respectfully requested. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below. The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

/Keiko K. Takagi/
Keiko K. Takagi
Registration No. 47,121

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE
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CUSTOMER NUMBER

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